

SR-710 Tunnel Technical Study
La Cañada Flintridge Community Meeting Summary
May 26, 2009
Lanternman Auditorium
6:30 – 8:30 p.m.
FINAL Draft

INTRODUCTION

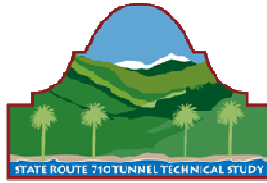
On May 26, 2009, Caltrans held a community meeting to inform community stakeholders about the SR-710 Tunnel Technical Study. The meeting took place at the Lanternman Auditorium in La Cañada Flintridge. Approximately 150 community members attended.

SR-710 Study Team members who attended included the following project management staff from Caltrans: Abdi Saghafi, SR-710 Tunnel Technical Study Project Manager; Deborah Harris, Chief, Media Relations and Public Affairs; and Pratheep Piratheepan, Geotechnical Lead. Los Angeles County Metropolitan Transportation Authority (Metro) staff Lynda Bybee, Executive Director of Regional Communications, and Shahrzad Amiri, Deputy Executive Officer, also attended. Other Study Team members who participated in the meeting were: Yoga Chandran and Ayman Salama of CH2MHILL; Steve Dubnewych and Steve Klein of Jacob Engineering; Bruce Shell of Earth Mechanics; Rebecca Barrantes and Glenda Silva of The Sierra Group (TSG); Rena Salcedo and Debbie Rusas of GCAP Services; and Katherine Padilla, John Limon and Thelma Herrera, of Katherine Padilla & Associates.

MEETING FORMAT

The meeting began at 6:30 pm with an informal Open House. There were informational displays set up in the lobby that depicted a range of topics, including: The Study Background and Public Involvement Process; The Technical Advisory Committee and the Steering Committee, both of which provide Study oversight; research methodologies of The Exploration Program; examples of subsurface soil and rock samples that are being collected as part of the Study; and modern tunnel building techniques. The Open House format provided community members with the opportunity to ask questions and engage in one-to-one conversations with knowledgeable Study Team Members.

The audience was welcomed by City of La Cañada Flintridge Mayor, Laura Olhasso. Mayor Olhasso cited her concerns about construction of a tunnel extending from SR-710 to La Cañada Flintridge. These concerns included increased traffic and emissions from vehicles using the tunnel, and the impact that pollution would have on the health of children attending any of the 12 schools in the community. The Mayor also informed the audience that La Cañada Flintridge Council is against the tunnel and would do anything to stop it. She went on to introduce Stephen Del Guercio, who sits on the SR-710 Tunnel Technical Study Steering Committee. Before handing the meeting over to Abdi Saghafi, Mayor Olhasso noted that this was the first time that Caltrans has hosted a forum in La Cañada Flintridge for the community to ask questions. She stressed the importance of this opportunity so Caltrans could address all questions.



The Presentation portion of the meeting was convened at approximately 7:15 pm.

Mr. Saghafi introduced Caltrans and Metro staff, as well as the Technical and Outreach Team members present. He then welcomed Steering Committee member Stephen Del Guercio and Technical Advisory Committee member Ann Wilson; and also welcomed Julianne Hines, District Director for Assemblymember Anthony Portantino.

Mr. Saghafi stated that the goal of the meeting was to describe the exploration program and purpose of the study. He also noted that there are some questions that can not be answered because they are outside of the scope of the current study and can only be addressed in an environmental document phase. Mr. Saghafi stressed the importance of transparency and open communication with the community throughout the study.

The meeting was turned over to Rebecca Barrantes, who reviewed the ground rules for conduct during the meeting, especially during the Question & Answer component. She informed the audience that the meeting would be documented and recorded, and that a meeting summary would be posted on the study website.

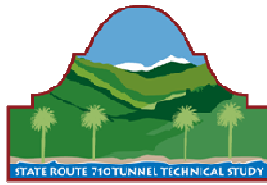
Steve Dubnewych and Yoga Chandran, Study Team geotechnical experts, then provided a PowerPoint presentation that addressed the benefits of a tunnel; important safety features and emergency systems utilized in tunnels; modern tunnel systems constructed in Madrid, Shanghai, and Paris; The Exploration Program that is currently underway to determine subsurface soil, rock and other geological conditions within the Study Area; and geological factors and their influence on tunnels. They also provided a summary of geotechnical testing performed in each of the 5 Zones within the study area and identified Superfund sites in Zones 4 and 5.

Following the geotechnical presentation, the Exploration Program notification process, including door-to-door outreach to neighborhoods adjacent to the exploration sites, was described by Rebecca Barrantes. The public involvement process for the study was reviewed, indicating frequency and timeframe for Steering and Technical Advisory Committee meetings, Community meetings, newsletters, presentations, and reports. Upcoming Community and Committee meeting dates were provided. Finally, the Study information office location and contact number was provided.

COMMUNITY DIALOGUE

After the presentation, community members participated in a Question & Answer session. Mr. Saghafi and Members of the Study Team responded to the questions. The session was facilitated by Rebecca Barrantes. Topics discussed included: the cost of the Study, purpose and need for extending the SR-710, potential costs of tunneling and possible sources of funding; alternatives to tunneling; and impacts of tunneling.

The questions and comments offered by community members are categorized and appear below. *Responses from Caltrans Project Manager Saghafi and Study Team Members are indicated in italics.*



Study Purpose

- It seems like we are being presented with a solution and I am not quite sure that the problem has been stated. I am assuming that there are some studies that were conducted that show an increase in traffic congestion and therefore you came to the conclusion that you needed to extend the 710 to the 210. How did you arrive to that conclusion?

As you know, the surface freeway was never materialized and this connection, this gap if you will, has been looked at for the last 40 years. There are those in urban planning, and traffic experts in Southern California, that tell us that this is the last gap in the Southern California freeway system and it presents significant traffic congestion and air quality impact.

- I don't think anyone here doubts that you can build a tunnel. We do not want to have meetings to hear about studies to build a tunnel, but want to meet about whether you are going to build a freeway in the first place.

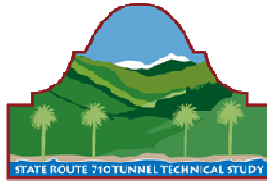
At this stage, in this current study, the best that we can do is what you have just observed. We do not have more information than what has been revealed during the exploration program. We have bored holes to see what type of geological formations exist and have conducted studies to see what types of faulting exist. The scope of the study is very limited. Congressman Schiff has dedicated more than \$2.5 million towards this study, specifically with the condition that it be conducted in a route neutral manner that is not specific to any area. What you are asking for is something that can only be answered in an environmental document phase, if we go in that direction. We can't answer those specific questions about traffic, air quality, and impact to local freeways at this point.

Study Costs

- Why use taxpayer money to study sites that are unlikely to be used?

We can't make decisions about specific routes. We do not know which scenario will relieve traffic congestion at this point. All possibilities will be looked at.

- Is there is a public-private partnership of rail lines and companies that build rail lines that are getting attention during this study? Trucks increase air pollution and there is a wastefulness of resources, due to low miles per gallon of gas. Is there a public-private partnership in existence that dedicates the same amount of money, time and resources to exploring the feasibility of using a rail just like there is to explore the feasibility of a tunnel?



I am also the Project Manager on the I-710 South Project, which is in the environmental impact phase. As part of that project, we are exploring alternative technologies, such as electric trucks, and other similar ideas. Our commitment as part of that project is to alleviate some of the air pollution that already exists in that area.

As far as your statement that it is a lot more efficient to move freight by rail instead of trucks, railroads are basically a private entity and have a lot of authority to do things that need to be done. There are two projects that have been completed that utilize rail. There are the Alameda Corridor and the Alameda Corridor-East, which were completed to move some of the cargo from the ports to be delivered to areas where they can be trucked to the rest of the country. As far as the funding, I don't believe there is enough public-private partnership interest for rail to develop in the area of movement of goods at this time. Again, I want to stress that Caltrans doesn't get involved with rail.

Comment from Metro: You are going to have to be able to radiate movement of goods into your community. Distribution of goods will involve at least one truck movement. We actually looked at the possibility of not including trucks in the tunnel. I can't say that we will say there will be no trucks. Perhaps we may exclude trucks over a certain size. I think some of us may be confused about the number of trucks that will be using the route.

- How much of this contract is funded by Caltrans and thus the citizens of California?

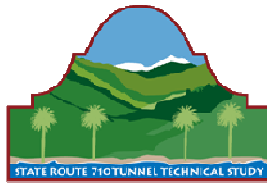
Our technical study for the tunnel is \$5.3 million for 2 years. That is from last August until the end of 2010. Our scope is covering the geotechnical and any studies related to the SR-710.

- You said before that you don't know what the tunnel would cost. For example, is it going to be \$30 billion or \$50 billion?

We don't like to talk about the cost because no matter what number we provide today, we will be challenged. We will be challenged by you and by the participants here. Also, each tunnel is different and you would have to account for all the factors of geotechnical conditions, type of materials that would be used, size of the tunnel, and all of these things that could impact the cost of a tunnel. That is really why we can not provide a total figure.

- For the sake of transparency, I would like to know what your company has been paid to-date for this study.

The Outreach consultant has a contract of about \$900,000 for the entire duration of the project. This is for all outreach activities in the entire study area. The geotechnical



consultant has a contract for \$3 million, which includes the cost of the exploration program, preparing tunnel selection criteria, and other related services.

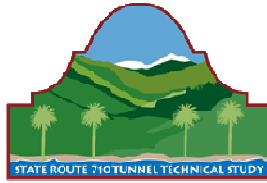
Research and Testing Methodology

- You mentioned two active faults, but we have seen in the past couple of years that we have assumed faults are inactive in the Los Angeles Basin that have proven to be active. What other faults are you considering?

When we talk about seismic hazards, there are two basic issues; one is ground shaking and the other is surface fault displacement. Many of the faults in the Los Angeles area are subsurface faults that could generate shaking but would not cause displacement at the tunnel because they are too deep. Regarding ground shaking, the earthquake energy comes from 10-15 miles depth; we will design for this for all seismically active faults in the Los Angeles region but it doesn't really matter which tunnel location we consider because the shaking would be about the same for each alternative tunnel location. It is the ground displacement issue that is important for specific tunnel locations. We know the Raymond Hill fault which extends through Zones 2, 3, and 4 represents a rupture hazard at tunnel depths and will design for it. Also we know the Alhambra Wash fault in Zones 4 and 5 is active. We are not sure about the rupture hazard at the Eagle Rock-San Rafael fault in Zone 3; we know it is young but at this time do not know if it is active so further investigations will be required if that location is chosen for the tunnel. However, the Eagle Rock-San Rafael fault is a relatively small fault so we expect to be able to safely design for any potential displacement that future studies might indicate.

- What are the geotechnical factors that influence tunneling? What is going to tell us where we can build a ramp and what are the negating factors that are going to eliminate zones?

We mentioned that one of the Superfund sites has extensive contamination of groundwater. We may decide that the risk is too high of building a tunnel there due to the liability in addition to safety hazards. Other types of conditions could be extreme faulting issues that are difficult to figure out or water displacements that are too hard to design for. Those types of issues might impact the geotechnical feasibility of building a tunnel. As you mentioned before, a lot of tunnels have been built in the last 20 years using sophisticated technology. We do have a lot of technology at our disposal from a construction standpoint. We will look at the data we collected in each zone about the geotechnical conditions and recommend those zones be studied further if we should move forward.



- You reviewed 5 geographical zones, but the gap between the SR-710 and the I-210 is the issue. Is this correct?

We are not looking at the gap between the SR-710 and the I-210; we are looking at the gap as a whole. The SR-710 ends and has to be extended.

Borings

- Why did you bore so many holes? Are you boring a bunch of holes that you do not need?

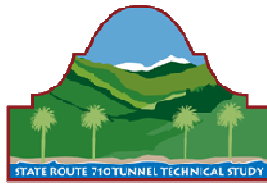
Metro completed a tunnel feasibility assessment study a few years ago. That was just the first step and there were a limited number of borings conducted that were nowhere near the number of borings completed during this study. This is really the next step. Between the two steps, we will have enough information to determine if we will proceed to the next phase.

- It appears that Zone 3 has more borings than the other zones and that you are particularly interested in this zone, which is the most convenient area for a tunnel. Please comment.

Our borings are selected to capture geological variations. The initial stage of the Exploration Program involved looking at existing data, geological variations and soil conditions to determine where borings are needed. Some zones have more complexity and variation than other zones. If you look at Zone 3, there is a lot of variation and 3 active faults cross it. For this reason, we added more borings to capture the complexity of the zone. Additionally, some areas in other zones had reliable existing data that proved useful for the study and eliminated the need for some borings. For example, in Zones 4 and 5, there was already data available from investigation of Superfund sites. In summary, there are two reasons why Zone 3 had more borings completed than other zones. The first reason is that there was more data available in the other zones when compared to Zone 3. The second is that Zone 3 has a lot more geological variation than other zones.

Route Neutral Study

- I have questions about the map. You mentioned that Zones 4 and 5 contain Superfund sites. What is the source of these Superfund sites? Also, if the goal is to connect the SR-710 to the I-210, what is the purpose of the almost horizontal lines on the map and what does that mean in terms of the route? How do Zones 1 and 5 fit into the scenario? Finally, what do you mean by route neutral?



The purpose is not to connect the SR-710 to the I-210, but is to extend the SR-710. Route neutrality means that there is no preferred route. We are looking at a 180 degree range of possibilities and routes extending from the end of the SR-710 freeway.

Congressman Schiff specifically requested that the study be conducted in a route neutral manner. This means that no specific preference is given to any specific alignment of the tunnel. We have to include all of these zones in our Exploration Program so that when the study is complete, we have data for various possibilities. As an example, if we had not looked at Zones 4 and 5, we would not have identified the Superfund sites and the complications that could arise. We want to assure you that we have been very objective and have not given a preference to any specific route.

Tunnel

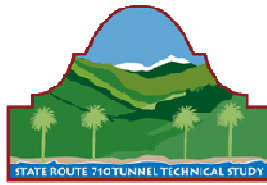
- In Zone 3, you start at 5.5 miles. That would be as long as the Shanghai tunnel and as long of the span of the Barcelona tunnel. How many lanes would that be?

We are not able to answer that question at this point. We have not completed a conceptual design of the tunnel. It is possible to have 3 lanes in the tunnel, or even more. If this project were to go into design and construction, the technology would be much different in say 10 years from now. In 10 years we may be able to use a tunneling machine that is 70 feet in diameter. I think that what we are talking about is the realm of possibilities; we can get it done at the scale that would be required.

- There have been some recent tunnel accidents in the news, such as the one in Switzerland. How are emergency situations and accidents dealt with in a tunnel of this size?

The issue of fire in a tunnel is very serious. We try to take advantage of lessons learned from these accidents and design for safety. I think that tunnel designs today are much safer than they were in the past. One thing that Caltrans learned is that they shouldn't allow tankers in the tunnel during peak traffic periods because that's when it is more likely that there will be an accident. So they restrict vehicles with flammable liquids during those times and they are only allowed through the tunnel from midnight to 4 or 5 in the morning.

As far as evacuation, the standard is that at every 650 feet in a tunnel, there should be a cross-passage. Every third or fourth cross-passage would allow emergency vehicles to go from one floor of the tunnel to the other. There are a lot of safety features that can be included in a tunnel. Materials that are used to build the tunnels are subject to stricter fire safety standards than they were just a few years ago. We designed a tunnel for Caltrans where the lining was required to withstand a 100 megawatt fire. Ten years



ago the standard was only 10 megawatt. We are headed in the direction of greater public safety. One of the benefits of a tunnel is that it has limited access, is under heavy surveillance and is only accessible at a few points. What you really have to protect is the entrance and exit of the tunnel.

Other

- Who do we contact to say stop looking at tunnels, stop looking at freeway, and look at rail? We need these answers. Who makes the decisions on the freeways and on this project?

There are several layers of decision making and there is not one person that makes the decision. The contact that would be best to respond to your concerns is Caltrans District 7 Director, Doug Failing. You can also contact Caltrans State Director, Will Kempton; Metro Board Representative for the San Gabriel Valley and City of Duarte Mayor, John Fasana; Metro Vice Chair and City of Glendale Councilmember, Ara Najarian; and Los Angeles County Supervisor Mike Antonovich. Those are direct Metro Board members that would have constituent influence.

- What is the origin and destination of traffic using a proposed tunnel? How many vehicles and trucks would be using the tunnel?

I can't answer that question because we have not tracked traffic patterns and we have not counted trucks versus cars.

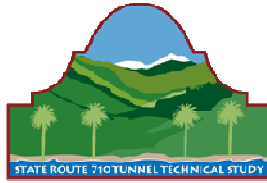
- Why are you not conducting traffic studies? Why is all of this money going to be spent if we don't know what the problem is or what the benefit of the tunnel will be?

The purpose for extending the SR-710 is based on the regional transportation model. Caltrans and Metro concurred that, based on the traffic modeling of impacts, extending the SR-710 using a tunnel may reduce impacts to the community and improve transportation mobility and relieve traffic.

In addition, the study has two committees: the Steering Committee and the Technical Advisory Committee. We were mandated by them to focus only on geotechnical aspects for this study.

Councilmember Stephen Del Guercio, who represents the City of La Canada Flintridge, corrected this statement made about the SR-710 Tunnel Study Steering Committee by providing the following comment:

We had a discussion in the first Steering Committee meeting about the proposed objectives of the study and everyone on the committee agreed that you need to define



those objectives and be honest with the public about what you are studying. We asked what they were prepared to study. What they were prepared to study was based on geotechnical tests. The City of La Canada Flintridge has always maintained that a cost benefit study would be needed. I am frankly very disappointed to hear that the next step is the EIR. If there is going to be an next step, it should be to answer those questions (posed here) in a document where you have specific information to provide to the stakeholders and to everybody making these decisions so they can decide if they are going to waste another \$100 million doing an expensive environmental document.

Caltrans provided the following response to Councilmember Stephen Del Guercio:

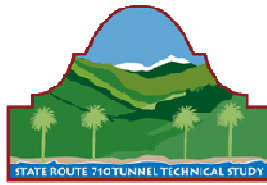
We stand corrected. It was not mandated but we had consensus from the Steering and Technical Advisory Committee members.

- Taking a look at history, we have learned that “if we build it they will come.” If you build this, what is going to make this project different than any of the other freeways we have built to relieve congestion?

As with any process, we have looked at a model, at the Southern California freeway network, where there is a disparity. As a matter of fact, SCAG is conducting a study and it should be published by the end of June or July. There are studies and models that have been conducted. We are not the ones that made the decision that this gap needs to be completed. We are simply trying to determine the geotechnical feasibility of building a tunnel as a possible option for extending the SR-710.

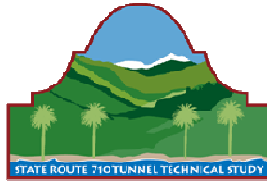
- I am a little disappointed that we are not talking about Long Beach truck traffic because the SR-710 is the Long Beach freeway, and the Long Beach and Los Angeles Ports are the third busiest ports in the world. I was wondering if you have considered setting this up so there would be a conveyer belt tunnel that is really small and doesn't have any people on it. I was thinking that the way we charge people extra money to fly out of Burbank because it is convenient, if people wanted to transport things out from Long Beach or Los Angeles, they would help us dig a hole in the ground. The tunnel would have a conveyer belt that would empty out in Palmdale, where there would be a nice, large, new trucking facility that would provide jobs for all those people that lost those houses up there. That would solve all these problems all at once. There are no human lives at stake. Is that possible?

We are a transportation agency and there are a lot of other agencies looking at movement of goods. Obviously, we have to be more efficient and environmentally friendly within our communities. We have a problem that needs to be solved in the short term, and those are long term solutions. I don't think we can wait that long. Again, that will most likely be decided at the end of this study as to whether this project will move forward or not.



COMMENTS:

- Have you contacted any of our local university engineering schools to come up with something more creative that could possibly reduce our carbon footprint? Why have you just fixated on a tunnel? What about extending the Alameda corridor? What about looking into a train that would bring goods into a central truck pick-up station in a less populated area? I would like to see alternatives to a tunnel at the next meeting.
- What is actually currently happening at the intersection of the SR-2, as it intersects what I think is the I-210? There are pockets of gravel. There are also new signals there. Is that related to this study? It looks like those signals were put in for preparation of more traffic.
- One option would be to ban trucks, if the tunnel should be built. For example, no trucks above I-5. The 110 Freeway does not allow trucks and has not for 50 years. Another thing is that if the tunnel should be made, the La Cañada Flintridge and other sound walls should be built before. In fact, we need them anyway.
- For many of us this is about trucks. Unfortunately the trucks that we see are not local delivery. A good example is that when the I-210 was completed, we had a tripling of truck traffic going to San Francisco and points north. This tunnel we likely be a shortcut from the port to send goods up north. We are really arguing that long haul trucks will use the tunnel, not just local delivery trucks and commuters.
- I drive through Alhambra every day and it takes me about a half an hour to get home from the end of the SR-710 freeway. I would like to say that the gap is real, it is a traffic problem, and if we do nothing, we are simply pushing the problem further south. Whether that is fair or not, that's what is happening. Alhambra has had to deal with this for the last 40 years. Fremont is full of traffic lights and then you have to pass the Gold Line, which stops traffic even further. I do think that something needs to be done. I did hear that maybe we can ban trucks in the tunnel. It is the auto problem that needs to be solved in my opinion because we need to get to and from work.
- Since we are not sure where the tunnel should go, is consideration going to be given to having 2 tunnels at the point where the 710 ends? We could have one going to the I-15 and one connecting to the I-5 up in Santa Clarita.
- This is a technical study. I thought I would be hearing from geologists and seismologists. I know that some gentlemen made some comments and I appreciate that information. I am concerned about faults. The 20 minutes that were reserved for the open house portion, provided the information that I thought we would be hearing during the meeting. I would appreciate more scientific, geological, seismological reports in the next meeting. There is another freeway that has a gap: the SR-2 Southbound. That freeway



was supposed to continue on through to West Los Angeles and connect to the 405 but they abandoned that idea because it went through Beverly Hills.

There were a few other comments made by attendees expressing disapproval of the study and opposition to building a tunnel. The common themes from these comments were that the tunnel would deteriorate their quality of life, increase traffic (particularly truck traffic), and air pollution. There were also questions directed towards Caltrans about other road issues unrelated to the study, such as lanes on local highways requiring repair, etc.

Following the Question, Answers & Comments component of the meeting, Mayor Olhasso summarized the concerns of the attendees. The Mayor expressed her opinion that there were existing options and routes for vehicles to use by taking the I-10 east or west and heading north on current freeways. She was also concerned about tunnel width, the number of lanes needed, and whether the tunnel would actually alleviate existing traffic. Considering these factors, Mayor Olhasso did not think that this was a solution for traffic congestion in the City of Alhambra. Her position is that the City of La Cañada Flintridge would not support a tunnel because of the increase of traffic in their community. Lastly, the Mayor asked interested attendees to email mayor@lcg.ca.gov to be put on her email list for the SR-710 Tunnel Technical Study.

NEXT STEPS

The meeting concluded at approximately 9:10 pm. At the meeting conclusion, Outreach Manager Rebecca Barrantes thanked the community of La Canada Flintridge for their participation and assured them that they would be kept informed throughout the Study.